Claim

I. Claim 1: What I claim as my invention is for evenly spaced holes drilled or punched through/partially through all any composite layers and throughout the diabetic healing shoe insole, or removable cast walker insole, to reduce peak plantar foot pressure and shear stress. The shape of the holes can be round, square, oval, hexagon, octagon, or can have a smaller round/octagon diameter on one surface and a larger round/octagon diameter on the opposite surface. These holes, can be varied in sizes from 1/16" to 1/2" to accommodate different weight loading requirements, and are separated by at least 1/4" to 1" away from each others and in a square, round, hexagon, octagon, or alternating patterns.

When there is a focal point of pressure, the holes will be distorted or stretched to the direction of the pressure which will also allow the insole material to distorted or "give" resulting in reduction of the peak plantar pressure and the associated shear stress. This will also eliminate any pressure transferring problems as encountered in other insoles. Removing the pressure will allow the insole material to return back to the original state.